side than in other forms of *N. spinulosum*, but the pinnae overlap more than in most, if not all, of the specimens of var. *dilatatum* that I have seen.   Moreover, the glandular indusia and the very thin, pale brown scales are distingushing marks.

The other new fern, which is, however, much easier to recognize, is *Botrychium obliquum*, var. *Oneidense*, which, according to Waters, has been found before only in central New York, in the Catskills, and near Washington.   It was growing in damp woods, like the typical form, but attracted notice by its blunter, clumsier appearance. It has shorter segments with fewer lobes, which are strongly rounded at the ends.   The lower pinnae have each three pairs of these lobes besides a larger terminal one.   The lobes look entire unless closely examined, when they are seen to be very faintly toothed.   Only one plant was found, and of this only the sterile portion.

JAMAICA PLAIN, MASSACHUSETTS.

PARTHENOGENESIS IN ANTENNARIA.

R. G. LEAVITT AND L. J. SPALDING.

WE have observed every necessary step in the formation of embryos directly from egg-cells without fertilization in *Antennaria fallax* and *A. neodioica*.   The flowers were carefully netted at a young stage and thus until the fruit was ripe were protected from pollen which might be brought from allied species or by a rare chance from the almost unknown male plants of the same species, either by insects or by winds.   Microtome sections showed normal embryo-sacs and egg-apparatus and subsequent steps in the development of the embryo and endosperm ; but no pollen tubes and no spermatic nuclei were seen.   Details with drawings will be published later.   Two other species under test conditions have shown embryo-formation, namely *A. canadensis* and *A. Parlinii*.   Inasmuch as two American and one European species of *Antennaria* have now been shown to be parthenogenetic, the last named two may be assumed to behave in the same way; but this will soon be a matter of careful determination by us.

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